Descriptive Statistics D:\PROJECTS\NPRA\TOPSRE~1\WINKST~1\SAG.DBF

## Variable Name is AREA

\_\_\_\_\_\_

Percentiles:		Tukey Five Number Summary:
0.0% = 0.25	Minimum	Minimum = 0.25
0.5% = 0.25		Fourth = $1.125$
2.5% = 0.25		Median = 4.125
10.0% = 0.50		Fourth = $12.875$
25.0% = 0.937	5 Quartile	Maximum = 118.75
50.0% = 4.125	Median	
75.0% = 13.81	25 Quartile	
90.0% = 66.92	499	
97.5% = 118.7	5	
99.5% = 118.7	5	Test for normality results:
100.0% = 118.7	5 Maximum	$D = .342$ $p \le 0.001$

Five number summary was calculated using the technique from UNDERSTANDING ROBUST AND EXPLORATORY DATA ANALYSIS by Hoaglin, Mosteller And Tukey. See complete reference in WINKS manual.

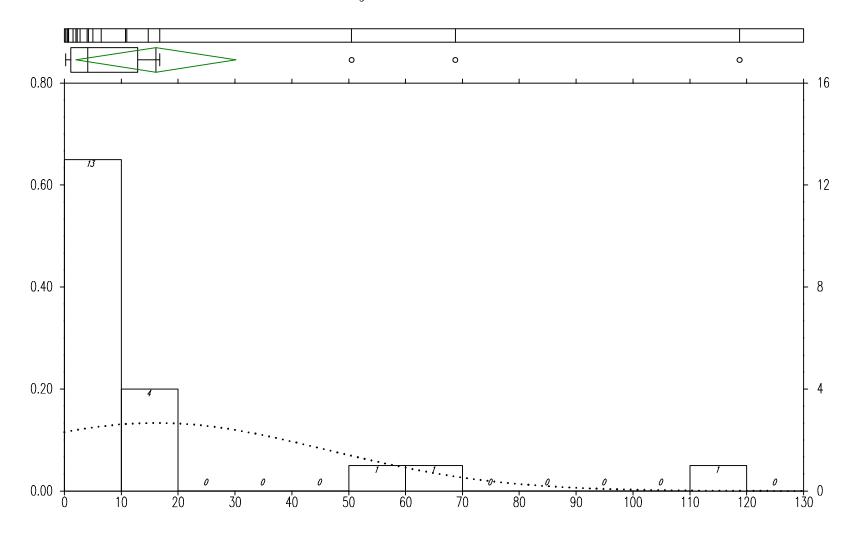
## Confidence Intervals about the mean:

\_\_\_\_\_

```
80 % C.I. based on a t(19) critical value of 1.33 is (7.20555, 25.01945) 90 % C.I. based on a t(19) critical value of 1.73 is (4.52677, 27.69823) 95 % C.I. based on a t(19) critical value of 2.1 is (2.0489, 30.1761) 98 % C.I. based on a t(19) critical value of 2.54 is (-0.89776, 33.12276) 99 % C.I. based on a t(19) critical value of 2.87 is (-3.10775, 35.33275)
```

The normality test suggests that the data are not normally distributed. The test for normality is a modified Kolmogorov-Smirnov test based on papers by Lilliefors and Dallal & Wilkinson. References in latenews.txt.

Sag River Closures — Area



AREA

Descriptive Statistics D:\PROJECTS\NPRA\TOPSRE~1\WINKST~1\SAG.DBF

Variable Name is HEIGHT

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```
Percentiles:
                                     Tukey Five Number Summary:
0.0\% = 5.60 Minimum
                                     Minimum = 5.60
0.5%
           = 5.60
                                     Fourth = 16.80
2.5%
          = 5.60
                                     Median = 36.15
          = 7.57
10.0%
                                    Fourth = 67.35
          = 16.30 Quartile
                                   Maximum = 284.20
25.0%
          = 36.15 Median
50.0%
          = 70.274990uartile
75.0%
90.0%
           = 96.40
          = 284.20
97.5%
99.5%
          = 284.20
                                     Test for normality results:
100.0%
          = 284.20 Maximum
                                     D = .218 p = 0.014
```

Five number summary was calculated using the technique from UNDERSTANDING ROBUST AND EXPLORATORY DATA ANALYSIS by Hoaglin, Mosteller And Tukey. See complete reference in WINKS manual.

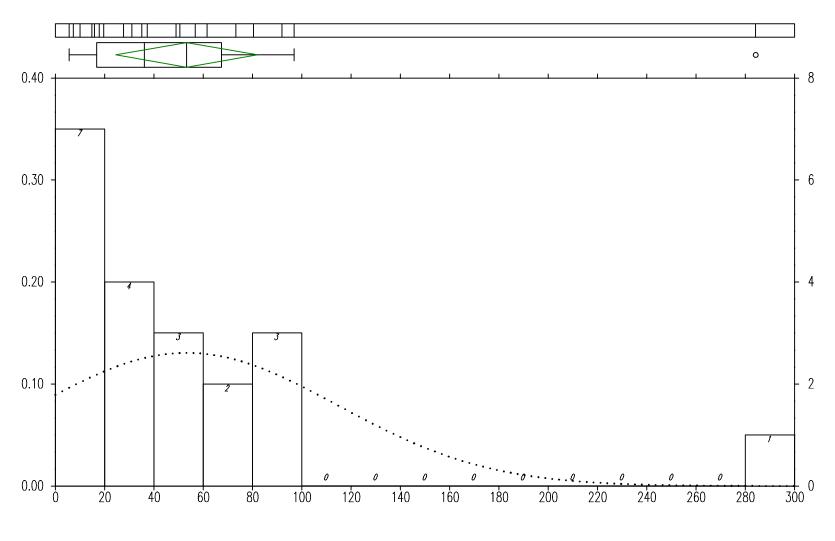
## Confidence Intervals about the mean:

\_\_\_\_\_

```
80 % C.I. based on a t(19) critical value of 1.33 is (35.09443, 71.51557) 90 % C.I. based on a t(19) critical value of 1.73 is (29.61757, 76.99243) 95 % C.I. based on a t(19) critical value of 2.1 is (24.55147, 82.05853) 98 % C.I. based on a t(19) critical value of 2.54 is (18.52692, 88.08308) 99 % C.I. based on a t(19) critical value of 2.87 is (14.00851, 92.60149)
```

The normality test suggests that the data are not normally distributed. The test for normality is a modified Kolmogorov-Smirnov test based on papers by Lilliefors and Dallal & Wilkinson. References in latenews.txt.

Sag River Closures — Height



HEIGHT

Linear Regression and Correlation

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Dependent variable is HEIGHT, 1 independent variables, 20 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	24.638755	7.9170101	3.1121288	0.006
AREA	1.7791308	.2374424	7.4928949	<.001

R-Square = 0.7572 Adjusted R-Square = 0.7437

Analysis of Variance to Test Regression Relation

Source	Sum of Sqs	df	Mean Sq	F	p-value	
Regression Error	53945.319 17295.256	1 18	53945.319 960.84755	56.143474	<.001	
Total	71240.575	 19				

A low p-value suggests that the dependent variable HEIGHT may be linearly related to independent variable(s).

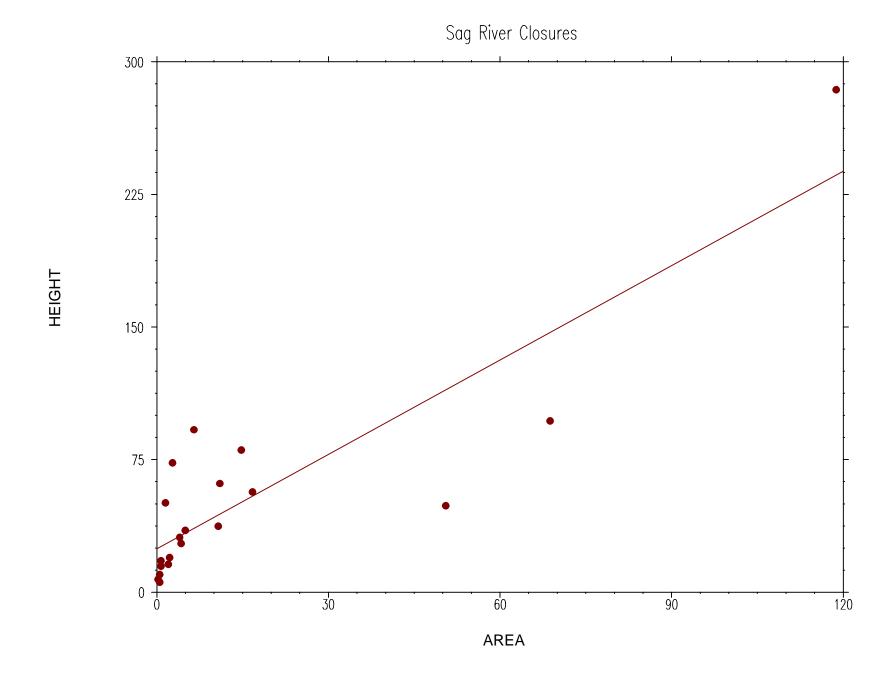
MEAN X = 16.112 S.D. X = 29.95 CORR XSS = 17042.68 MEAN Y = 53.305 S.D. Y = 61.233 CORR YSS = 71240.57 REGRESSION MS= 53945.319 RESIDUAL MS= 960.848

Pearson's r (Correlation Coefficient) = 0.8702

The linear regression equation is: HEIGHT = 24.63876 + 1.779131 \* AREA

Test of hypothesis to determine significance of relationship: H(null): Slope = 0 or H(null): r = 0 (two-tailed test) t = 7.49 with 18 degrees of freedom p <= .001

Note: A low p-value implies that the slope does not = 0.



Correlation Coefficients D:\PROJECTS\NPRA\TOPSRE~1\WINKST~1\SAG.DBF

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Variables used : AREA and HEIGHT

Number of cases used: 20

Pearson's r (Correlations Coefficient) = 0.8702 R-Square = 0.7572

Test of hypothesis to determine significance of relationship: H(null): Slope = 0 or H(null): r = 0

(Pearson's) t = 7.492895 with 18 d.f. p < 0.001 (A low p-value implies that the slope does not = 0.)

Spearman's Rank Correlation Coefficient = 0.8473

Linear Regression and Correlation

D:\PROJECTS\NPRA\TOPSRE~1\WINKST~1\SAG.DBF

Dependent variable is LOGHEIGHT, 1 independent variables, 20 cases.

Variable	Coefficient	St. Error	t-value	p(2 tail)
Intercept	2.8202966	.1502618	18.769224	<.001
LOGAREA	.4893187	.0678063	7.216422	<.001

R-Square = 0.7431 Adjusted R-Square = 0.7289

Analysis of Variance to Test Regression Relation

Source	Sum of Sqs	df	Mean Sq	F	p-value	
Regression Error	13.371723 4.621852	1 18	13.371723 .2567696	52.076747	<.001	
Total	17.993575	19				

A low p-value suggests that the dependent variable LOGHEIGHT may be linearly related to independent variable(s).

MEAN X = 1.456 S.D. X = 1.714 CORR XSS = 55.847 MEAN Y = 3.533 S.D. Y = .973 CORR YSS = 17.994 REGRESSION MS= 13.372 RESIDUAL MS= .257

Pearson's r (Correlation Coefficient) = 0.8621

The linear regression equation is:
LOGHEIGHT = 2.820297 + .4893187 \* LOGAREA

Test of hypothesis to determine significance of relationship: H(null): Slope = 0 or H(null): r = 0 (two-tailed test) t = 7.22 with 18 degrees of freedom p <= .001

Note: A low p-value implies that the slope does not = 0.

